

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	O. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,844 01/13/2004		Sadeg M. Faris		1411	
26665	7590	01/11/2005	EXAMINER		
REVEO,		 .	HANIG, RICHARD E		
3 WESTCHESTER PLAZA ELMSFORD, NY 10523				ART UNIT	PAPER NUMBER
	,			2873	
				DATE MAILED: 01/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		M	_
	Application No.	Applicant(s)	_
	10/756,844	FARIS, SADEG M.	
Office Action Summary	Examiner	Art Unit	_
•	Richard Hanig	2873	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per	N. R 1.136(a). In no event, however, may a	reply be timely filed ty (30) days will be considered timely.	
 Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b). 	atute, cause the application to become A	BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on _	,		
	This action is non-final.		
3) Since this application is in condition for allo	wance except for formal mat	ters, prosecution as to the merits is	
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.[). 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-17 is/are pending in the applicat	ion.		
4a) Of the above claim(s) is/are without	drawn from consideration.		
5) Claim(s) is/are allowed.	•	·	
6)⊠ Claim(s) <u>1-7,9-12 and 16</u> is/are rejected.			
7)⊠ Claim(s) <u>8,13-15 and 17</u> is/are objected to.			
8) Claim(s) are subject to restriction an	d/or election requirement.		
Application Papers			
9)⊠ The specification is objected to by the Exam	niner.		
10)⊠ The drawing(s) filed on 13 January 2004 is/a	are: a)⊠ accepted or b)□ o	bjected to by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the cor	rection is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).	
11)☐ The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
 12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents. 		} 119(a)-(d) or (f).	
2. Certified copies of the priority documents		upplication No	
3. Copies of the certified copies of the p			
application from the International Bur	•	received in this National Glage	
* See the attached detailed Office action for a		received.	
Attachment(s)	_		
1) ⊠ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date	
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 	r—	nformal Patent Application (PTO-152)	

Application/Control Number: 10/756,844

Art Unit: 2873

DETAILED ACTION

Page 2

1. The disclosure is objected to because of the following informalities: In the brief description of the drawings fig. 4 is not listed.

Appropriate correction is required.

- 2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 14 there is no discussion of the drain regions in the specification.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-7, 9-12, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pratt, Jr. et al (4382660). For claim 1, Pratt, Jr. et al disclose in fig. 23 an optical transistor which has a light intensity modulator region 856 (see also col. 17, line 31) but does not necessarily show a photo conductor region, however, region 855 is an equivalent region where external light (a control light) will cause electron hole pairs that will effect the modulation of the incoming beam, and it is a design choice how this region is constructed as long as electrons and holes are formed that will effect the modulation. The types of terminals and modulators are design choices that are used to optimize the output. There is in col. 13, line 67, a discussion of a bi-stable system. Also one skilled in the art would know to form an array to be used in a communication system.

Application/Control Number: 10/756,844 Page 3

Art Unit: 2873

5. Claims 8, 13-15, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: In the claim system using quantum wells or having a second photo conductor or having a first and second array configuration is not shown or suggested by the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Hanig whose telephone number is 571-272-2329. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RAT 01/06/04

Scott J. Sügarman Primary Examiner